

SEQUENCE LISTING

<110> Wu Dr., Keqiang
Miki Dr., Brian L
Tian Dr., Lining
Brown Dr., Dan

<120> Repressing Gene Expression in Plants

<130> 08-883779EP

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<170> PatentIn Ver. 2.0

<210> 1

<211> 1807

<212> DNA

<213> Arabidopsis thaliana

<400> 1

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<210> 2

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<212> PRT

<213> Arabidopsis thaliana

<400> 2

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Gly Gln Gly His Pro Met Lys Pro His Arg Ile Arg Met Thr His Ala
      35             40             45

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Leu Leu Ala His Tyr Gly Leu Leu Gln His Met Gln Val Leu Lys Pro
      50             55             60

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Phe Pro Ala Arg Glu Arg Asp Leu Cys Arg Phe His Ala Asp Asp Tyr
      65             70             75             80

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Val Ser Phe Leu Arg Ser Ile Thr Pro Glu Thr Gln Gln Asp Gln Ile
      85             90             95

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Arg Gln Leu Lys Arg Phe Asn Val Gly Glu Asp Cys Pro Val Phe Asp
      100            105            110

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Gly Leu Tyr Ser Phe Cys Gln Thr Tyr Ala Gly Gly Ser Val Gly Gly
 115 120 125

Ser Val Lys Leu Asn His Gly Leu Cys Asp Ile Ala Ile Asn Trp Ala
 130 135 140

Gly Gly Leu His His Ala Lys Lys Cys Glu Ala Ser Gly Phe Cys Tyr
 145 150 155 160

Val Asn Asp Ile Val Leu Ala Ile Leu Glu Leu Leu Lys Gln His Glu
 165 170 175

Arg Val Leu Tyr Val Asp Ile Asp Ile His His Gly Asp Gly Val Glu
 180 185 190

Glu Ala Phe Tyr Ala Thr Asp Arg Val Met Thr Val Ser Phe His Lys
 195 200 205

Phe Gly Asp Tyr Phe Pro Gly Thr Gly His Ile Gln Asp Ile Gly Tyr
 210 215 220

Gly Ser Gly Lys Tyr Tyr Ser Leu Asn Val Pro Leu Asp Asp Gly Ile
 225 230 235 240

Asp Asp Glu Ser Tyr His Leu Leu Phe Lys Pro Ile Met Gly Lys Val
 245 250 255

Met Glu Ile Phe Arg Pro Gly Ala Val Val Leu Gln Cys Gly Ala Asp
 260 265 270

Ser Leu Ser Gly Asp Arg Leu Gly Cys Phe Asn Leu Ser Ile Lys Gly
 275 280 285

His Ala Glu Cys Val Lys Phe Met Arg Ser Phe Asn Val Pro Leu Leu
 290 295 300

Leu Leu Gly Gly Gly Gly Tyr Thr Ile Arg Asn Val Ala Arg Cys Trp
 305 310 315 320

Cys Tyr Glu Thr Gly Val Ala Leu Gly Val Glu Val Glu Asp Lys Met

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325

330

335

Pro Glu His Glu Tyr Tyr Glu Tyr Phe Gly Pro Asp Tyr Thr Leu His
340 345 350

Val Ala Pro Ser Asn Met Glu Asn Lys Asn Ser Arg Gln Met Leu Glu
355 360 365

Glu Ile Arg Asn Asp Leu Leu His Asn Leu Ser Lys Leu Gln His Ala
370 375 380

Pro Ser Val Pro Phe Gln Glu Arg Pro Pro Asp Thr Glu Thr Pro Glu
385 390 395 400

Val Asp Glu Asp Gln Glu Asp Gly Asp Lys Arg Trp Asp Pro Asp Ser
405 410 415

Asp Met Asp Val Asp Asp Asp Arg Lys Pro Ile Pro Ser Arg Val Lys
420 425 430

Arg Glu Ala Val Glu Pro Asp Thr Lys Asp Lys Asp Gly Leu Lys Gly
435 440 445

Ile Met Glu Arg Gly Lys Gly Cys Glu Val Glu Val Asp Glu Ser Gly
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Ser Thr Lys Val Thr Gly Val Asn Pro Val Gly Val Glu Glu Ala Ser
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Phe Pro Pro Lys Thr
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<210> 3

<211> 1800

<212> DNA

<213> Arabidopsis thaliana

<400> 3

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<212> PRT

<213> *Arabidopsis thaliana*

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15

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Tyr Tyr Gly Gln Gly His Pro Met Lys Pro His Arg Ile Arg Met Ala
35 40 45

His Ser Leu Ile Ile His Tyr His Leu His Arg Arg Leu Glu Ile Ser
50 55 60

Arg Pro Ser Leu Ala Asp Ala Ser Asp Ile Gly Arg Phe His Ser Pro
65 70 75 80

Glu Tyr Val Asp Phe Leu Ala Ser Val Ser Pro Glu Ser Met Gly Asp
85 90 95

Pro Ser Ala Ala Arg Asn Leu Arg Arg Phe Asn Val Gly Glu Asp Cys
100 105 110

Pro Val Phe Asp Gly Leu Phe Asp Phe Cys Arg Ala Ser Ala Gly Gly
115 120 125

Ser Ile Gly Ala Ala Val Lys Leu Asn Arg Gln Asp Ala Asp Ile Ala
130 135 140

Ile Asn Trp Gly Gly Gly Leu His His Ala Lys Lys Ser Glu Ala Ser
145 150 155 160

Gly Phe Cys Tyr Val Asn Asp Ile Val Leu Gly Ile Leu Glu Leu Leu
165 170 175

Lys Met Phe Lys Arg Val Leu Tyr Ile Asp Ile Asp Val His His Gly
180 185 190

Asp Gly Val Glu Glu Ala Phe Tyr Thr Thr Asp Arg Val Met Thr Val
195 200 205

Ser Phe His Lys Phe Gly Asp Phe Phe Pro Gly Thr Gly His Ile Arg
210 215 220

Asp Val Gly Ala Glu Lys Gly Lys Tyr Tyr Ala Leu Asn Val Pro Leu
225 230 235 240

Asn Asp Gly Met Asp Asp Glu Ser Phe Arg Ser Leu Phe Arg Pro Leu
 245 250 255

Ile Gln Lys Val Met Glu Val Tyr Gln Pro Glu Ala Val Val Leu Gln
 260 265 270

Cys Gly Ala Asp Ser Leu Ser Gly Asp Arg Leu Gly Cys Phe Asn Leu
 275 280 285

Ser Val Lys Gly His Ala Asp Cys Leu Arg Phe Leu Arg Ser Tyr Asn
 290 295 300

Val Pro Leu Met Val Leu Gly Gly Glu Gly Tyr Thr Ile Arg Asn Val
 305 310 315 320

Ala Arg Cys Trp Cys Tyr Glu Thr Ala Val Ala Val Gly Val Glu Pro
 325 330 335

Asp Asn Lys Leu Pro Tyr Asn Glu Tyr Phe Glu Tyr Phe Gly Pro Asp
 340 345 350

Tyr Thr Leu His Val Asp Pro Ser Pro Met Glu Asn Leu Asn Thr Pro
 355 360 365

Lys Asp Met Glu Arg Ile Arg Asn Thr Leu Leu Glu Gln Leu Ser Gly
 370 375 380

Leu Ile His Ala Pro Ser Val Gln Phe Gln His Thr Pro Pro Val Asn
 385 390 395 400

Arg Val Leu Asp Glu Pro Glu Asp Asp Met Glu Thr Arg Pro Lys Pro
 405 410 415

Arg Xaa Trp Ser Gly Thr Ala Thr Tyr Glu Ser Asp Ser Asp Asp Asp
 420 425 430

Asp Lys Pro Leu His Gly Tyr Ser Cys Arg Gly Gly Ala Thr Thr Asp
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Arg Asp Ser Thr Gly Glu Asp Glu Met Asp Asp Asp Asn Pro Glu Pro

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Asp Val Asn Pro Pro Ser Ser
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<212> DNA

<213> Arabidopsis thaliana

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<213> Arabidopsis thaliana

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20 25 30

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Glu Cys Lys Asn Lys Lys Gly Glu Phe Val Pro Leu His Val Lys Val
35 40 45

Gly Asn Gln Asn Leu Val Leu Gly Thr Leu Ser Thr Glu Asn Ile Pro
50 55 60

Gln Leu Phe Cys Asp Leu Val Phe Asp Lys Glu Phe Glu Leu Ser His
65 70 75 80

Thr Trp Gly Lys Gly Ser Val Tyr Phe Val Gly Tyr Lys Thr Pro Asn
85 90 95

Ile Glu Pro Gln Gly Tyr Ser Glu Glu Glu Glu Glu Glu Glu Glu
100 105 110

Val Pro Ala Gly Asn Ala Ala Lys Ala Val Ala Lys Pro Lys Ala Lys
115 120 125

Pro Ala Glu Val Lys Pro Ala Val Asp Asp Glu Glu Asp Glu Ser Asp
130 135 140

Ser Asp Gly Met Asp Glu Asp Asp Ser Asp Gly Glu Asp Ser Glu Glu
145 150 155 160

Glu Glu Pro Thr Pro Lys Lys Pro Ala Ser Ser Lys Lys Arg Ala Asn
165 170 175

Glu Thr Thr Pro Lys Ala Pro Val Ser Ala Lys Lys Ala Lys Val Ala
180 185 190

Val Thr Pro Gln Lys Thr Asp Glu Lys Lys Lys Gly Gly Lys Ala Ala
195 200 205

Asn Gln Ser Pro Lys Ser Ala Ser Gln Val Ser Cys Gly Ser Cys Lys
210 215 220

Lys Thr Phe Asn Ser Gly Asn Ala Leu Glu Ser His Asn Lys Ala Lys
225 230 235 240

His Ala Ala Ala Lys
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 <213> Arabidopsis thaliana

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 <212> PRT
 <213> Arabidopsis thaliana

<400> 8
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 20 25 30

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Cys Thr Val Lys Ser Gly Glu Ser Val Val Leu Ser Val Thr Val Gly
35 40 45

Gly Ala Lys Leu Val Ile Gly Thr Leu Ser Gln Asp Lys Phe Pro Gln
50 55 60

Ile Ser Phe Asp Leu Val Phe Asp Lys Glu Phe Glu Leu Ser His Ser
65 70 75 80

Gly Thr Lys Ala Asn Val His Phe Ile Gly Tyr Lys Ser Pro Asn Ile
85 90 95

Glu Gln Asp Asp Phe Thr Ser Ser Asp Asp Glu Asp Val Pro Glu Ala
100 105 110

Val Pro Ala Pro Ala Pro Thr Ala Val Thr Ala Asn Gly Asn Ala Gly
115 120 125

Ala Ala Val Val Lys Ala Asp Thr Lys Pro Lys Ala Lys Pro Ala Glu
130 135 140

Val Lys Pro Ala Glu Glu Lys Pro Glu Ser Asp Glu Glu Asp Glu Ser
145 150 155 160

Asp Asp Glu Asp Glu Ser Glu Glu Asp Asp Asp Ser Glu Lys Gly Met
165 170 175

Asp Val Asp Glu Asp Asp Ser Asp Asp Asp Glu Glu Glu Asp Ser Glu
180 185 190

Asp Glu Glu Glu Glu Glu Thr Pro Lys Lys Pro Glu Pro Ile Asn Lys
195 200 205

Lys Arg Pro Asn Glu Ser Val Ser Lys Thr Pro Val Ser Gly Lys Lys
210 215 220

Ala Lys Pro Ala Ala Ala Pro Ala Ser Thr Pro Gln Lys Thr Glu Lys
225 230 235 240

Lys Lys Gly Gly His Thr Ala Thr Pro His Pro Ala Lys Lys Gly Gly

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245

250

255

Lys Ser Pro Val Asn Ala Asn Gln Ser Pro Lys Ser Gly Gly Gln Ser
260 265 270

Ser Gly Gly Asn Asn Asn Lys Lys Pro Phe Asn Ser Gly Lys Gln Phe
275 280 285

Gly Gly Ser Asn Asn Lys Gly Ser Asn Lys Gly Lys Gly Lys Gly Arg
290 295 300

Ala

305

<210> 9

<211> 40

<212> DNA

<213> Artificial Sequence

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<223> Description of Artificial Sequence:primer

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<210> 10

<211> 28

<212> DNA

<213> Artificial Sequence

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<223> Description of Artificial Sequence:primer

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28

<210> 11

<211> 29

<212> DNA

<213> Artificial Sequence

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<220>

<223> Description of Artificial Sequence:primer

<400> 11

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29